CLAIMS

WHAT IS CLAIMED IS:

1. A method of capturing an image by use of a camera, the method comprising:

placing a scene within a field of vision of a wide angle lens coupled to the camera;

storing image data of the scene in an image collection array;

digitizing the scene image data into a digitized scene image data and storing the digitized scene image data in memory;

selecting a plurality of subsets of the digitized scene image data; and

performing additional processing on the selected subsets of the digitized scene image data.

2. The method of claim 1 wherein the plurality of subsets of the digitized scene image data are selected serially.

3. The method of claim 1 further comprising:

reconstructing the selected plurality of subsets into an integrated output image.

4. The method of claim 1 wherein a subset corresponds to

a focus area in the scene.

5. The method of claim 1 wherein the camera is used to transmit images on a network.

6. The method of claim 1 wherein the camera is communicatively coupled to a set top box that is capable of transmitting images over data streams in a network.

7. The method of claim 1 wherein the selecting the subsets is controlled by a set top box that is capable to transmit images across a network.

8. The method of claim 1 wherein the selecting the subsets is controlled by the camera that is capable to transmit images across a network.

9. The method of claim 1 wherein the selecting the subsets is controlled by a processor device.

10. The method of claim 1 wherein the performing the additional processing is controlled by a processor device.

11. The method of claim 1 wherein the performing the

additional processing is controlled by a set top box that is capable to transmit images across a network.

12. The method of claim 1 wherein the camera is communicatively coupled to a companion box that is capable to control a set top box for transmitting images across a network

13. The method of claim 1 wherein the selecting the subsets is controlled by a companion box that is capable to control a set top box for transmitting images across a network.

14. The method of claim 1 wherein the performing the additional processing is controlled by a companion box that is capable to control a set top box for transmitting images across a network.

15. The method of claim 1 wherein the additional processing comprises:

performing distortion compensation on the selected subset of the digitized scene image data.

16. The method of claim 1 wherein the additional

processing comprises:

performing compression on the selected subset of the digitized scene image data.

17. The method of claim 1, further comprising:

transmitting the selected subsets of the digitized scene image data to a destination device.

18. The method of claim 1 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

19. The method of claim 1 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

20. The method of claim 1 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

21. The method of claim 1 wherein at least two of the selected subsets are overlapping.

22. The method of claim 1 wherein at least two of the selected subsets are non-overlapping.

23. A method of controlling the capture of an image of an object in a camera field of vision, the method comprising:

storing, in an image collection array, data of a scene within the field of vision;

storing, in memory, digitized data of the scene within the field of vision;

selecting a plurality of subsets of the digitized data of the scene; and

performing additional processing on the subsets of the digitized data of the scene.

24. The method of claim 23 wherein the plurality of subsets of the digitized scene image data are selected serially.

25. The method of claim 23 further comprising:

reconstructing the selected plurality of subsets into an integrated output image.

26. The method of claim 23 wherein a subset corresponds to a focus area in the scene.

27. The method of claim 23 wherein the camera is used to transmit images in a network.

28. The method of claim 23 wherein the camera is communicatively coupled to a first unit that is capable to transmit images in a network.

29. The method of claim 23 wherein the selecting the subsets is controlled by a first unit that is capable to transmit images in a network.

30. The method of claim 23 wherein the performing the additional processing is controlled by a first unit that is capable to transmit images in a network.

31. The method of claim 23 wherein the camera is communicatively coupled to a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

32. The method of claim 23 wherein the selecting the subsets is controlled by a companion unit that is capable of being communicatively coupled to a first unit for

transmitting images in a network.

33. The method of claim 23 wherein the performing the additional processing is controlled by a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

34. The method of claim 23 wherein the camera is communicatively coupled to a processing device.

35. The method of claim 23 wherein the selecting the subsets is controlled by a processing device.

36. The method of claim 23 wherein the performing the additional processing is controlled by a processing device.

37. The method of claim 23 wherein the additional processing comprises:

performing compression on the selected subsets of the digitized data of the scene.

38. The method of claim 23, further comprising:

transmitting the selected subsets of the digitized data to a destination device.

39. The method of claim 23 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

40. The method of claim 23 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

41. The method of claim 23 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

42. The method of claim 23 wherein at least two of the selected subsets are overlapping.

43. The method of claim 23 wherein at least two of the selected subsets are non-overlapping.

44. An article of manufacture, comprising:

a machine-readable medium having stored thereon instructions to:

store image data of a scene in an image collection

array;

digitize the scene image data into a digitized scene image data and store the digitized scene image data in memory;

select a plurality of subsets of the digitized scene image data; and

perform additional processing on the selected subsets of the digitized scene image data.

45. An article of manufacture, comprising:

a machine-readable medium having stored thereon instructions to:

store, in an image collection array, data of a scene within a field of vision of a wide angle lens of a camera;

store, in memory, digitized data of the scene within the field of vision;

select a plurality of subsets of the digitized data of the scene; and

perform additional processing on the subsets of the digitized data of the scene.

46. An apparatus for controlling the image capture by a camera, the apparatus comprising:

a unit capable of being communicatively coupled to the

camera, and capable to store digitized data of a scene within a field of vision of the camera;

the unit including a webcam engine capable to select a plurality of subsets of the stored digitized data of the scene;

the unit further including a processor communicatively coupled to the webcam engine and capable to execute the webcam engine to permit the selection of the subsets of the stored digitized data.

47. The apparatus of claim 46 wherein the plurality of subsets of the digitized scene image data are selected serially.

48. The apparatus of claim 46 further comprising:

a reconstruction stage communicatively coupled to the webcam engine and capable to reconstruct the selected plurality of subsets into an integrated output image.

49. The apparatus of claim 46 wherein a subset corresponds to a focus area in the scene.

50. The apparatus of claim 46 wherein one of the selected subsets of the digitized scene image data is selected based

on detected activity in the scene.

51. The apparatus of claim 46 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

52. The apparatus of claim 46 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

53. The apparatus of claim 46 wherein at least two of the selected subsets are overlapping.

54. The apparatus of claim 46 wherein at least two of the selected subsets are non-overlapping.

55. The apparatus of claim 46 wherein the unit further comprises:

an image correction module communicatively coupled to the processor and capable to perform distortion compensation on the selected subset.

56. The apparatus of claim 46 wherein the unit is a set

top box.

57. The apparatus of claim 46 wherein the unit is a processor.

58. The apparatus of claim 46 wherein the unit is a companion box.

59. An apparatus for controlling the capture of an image of an object, the apparatus comprising:

a lens capable to capture a scene within a wide field of vision of the lens;

an image collection array communicatively coupled to the lens and capable to store data of the scene within the wide field of vision;

a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the wide field of vision; and

a processing stage communicatively coupled to the memory and capable to select a plurality of subsets of the digitized data of the scene in order to generate an image of the captured scene.

60. The apparatus of claim 59 wherein the plurality of

subsets of the digitized scene image data are selected serially.

61. The apparatus of claim 59 further comprising:

a reconstruction stage communicatively coupled to the processing stage and capable to reconstruct the selected plurality of subsets into an integrated output image.

62. The apparatus of claim 59 wherein a subset corresponds to a focus area in the scene.

63. The apparatus of claim 59 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

64. The apparatus of claim 59 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

65. The apparatus of claim 59 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

66. The apparatus of claim 59 wherein at least two of the selected subsets are overlapping.

67. The apparatus of claim 59 wherein at least two of the selected subsets are non-overlapping.

68. The apparatus of claim 59 wherein the processing stage further includes a webcam engine communicatively coupled to the memory and capable to select the subsets of the digitized data of the scene.

69. The apparatus of claim 59 wherein the processing stage further includes an image correction engine communicatively coupled to the processor and capable to perform distortion compensation on the selected subset.

70. An apparatus for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising:

a camera including a wide angle lens capable to capture a scene within a field of vision of the wide angle lens;

an image collection array communicatively coupled to the wide angle lens and capable to store data of the scene

within the field of vision;

a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the field of vision; and

a webcam engine communicatively coupled to the memory and capable to select a plurality of subsets of the digitized data of the scene to simulate at least one function of the camera.

71. The method of claim 70 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

72. The method of claim 70 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

73. The method of claim 70 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

74. The method of claim 70 wherein at least two of the selected subsets are overlapping.

75. The method of claim 70 wherein at least two of the selected subsets are non-overlapping.

76. The apparatus of claim 70, further comprising:

a compression/correction engine communicatively coupled to the memory and capable to perform compression and distortion compensation on the subset of the digitized data of the scene.

77. The apparatus of claim 70 wherein the camera is capable to transmit images to a destination device.

78. An apparatus for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising:

first means for storing, in an image collection array, data of a scene within the field of vision;

communicatively coupled to the first storing means, second means for storing, in memory, digitized data of the scene within the field of vision;

communicatively coupled to the second storing means, means for selecting a plurality of subsets of the digitized data of the scene to simulate at least one of the functions

of a camera; and

communicatively coupled to the selecting means, means for performing additional processing on the subsets of the digitized data of the scene.

79. An apparatus for capturing an image by use of a camera, the apparatus comprising:

means for placing a scene within a field of vision of a wide angle lens coupled to the camera;

communicatively coupled to the placing means, means for storing image data of the scene in an image collection array;

communicatively coupled to the storing means, means for digitizing the scene image data into a digitized scene image data and for storing the digitized scene image data in memory;

communicatively coupled to the digitizing and storing means, means for selecting a plurality of subsets of the digitized data of the scene; and

communicatively coupled to the selecting means, means for performing additional processing on the selected subsets of the digitized scene image data.